1.	Course title	**Computer Science for Intelligent Systems**	
2.	Course code	InIS-Z-01	
3.	Study program	**Intelligent Systems Engineering**	
4.	Unit offering the course	**FCSE**	
5.	Undergraduate/master/PhD	**Master**	
6.	Year/semester 1/winter/compulsory	7. ECTS: **6**	
8.	Teacher(s)	prof. Smile Markovski, prof. Ana Madevska Bogdanova	
9.	Course prerequisites	None	
10.	Goals (competences): To enable the students to obtain knowledge for formal tools for modelling and development of algorithms needed to develop Artificial Intelligent System applications. The students will be introduced to the formal theory of languages, computational theory, basic models for building biological sequences, appropriate data structures for analyzing the biological data.		
11.	Course content: Formal languages (regular languages, context free languages, Turing machines, complexity theory), data structures and algorithms (sequences, trees, different algorithmic techniques, string processing, data compression)		
12.	Teaching methods: Lectures supported by slide presentations, interactive lectures, trainings (using lab equipment and software packages), team work, case studies, invited guests and lectures, individual practical assignments presentations, seminar paper, e-learning (forums, consultations).		
13.	Total available time	6 ECTS x 30 hours = 180 hours	
14.	Distribution of the available time	30+30+40+40+40 = 180 hours	

15.	Teaching activities	15.1.	Lectures	30 hours
		15.2.	Training (labs, problem solving), seminar and team work	30 hours
16.	Other activities	16.1.	Project work	40 hours
		16.2.	Self study	40 hours
		16.3.	Home work	40 hours

17.	Grading		
	17.1.	Tests	20 points
	17.2.	Seminar work/project (written or oral presentation)	50 points
	17.3.	Active participation	30 points

18.	Grading criteria	to 59 points	5 (five) (F)
		from 60 to 68 points	6 (six) (E)
		from 69 to 76 points	7 (seven) (D)
		from 77 to 84 points	8 (eight) (C)
		from 85 to 92 points	9 (nine) (B)
		from 93 to 100 points	10 (ten) (A)

19.	Final exam prerequisites	Successfully completed activities 15.1 and 15.2			
20.	Course language	Macedonian and English			
21.	Quality assurance methods	Internal evaluation and student questionnaires			
22.	Literature				
	22.1.	Compulsory			
		No.	Authors	Title	Publisher	Year
		1.	Michael Sipser	Introduction To The Theory Of Computation	Thomson Course Technology	2006
		2.	Thomas H. Cormen Charles E. Leiserson Ronald L. Rivest Clifford Stein	Introduction to algorithms	The MIT Press	2001
		3.				
	22.2.	Additional			
		No.	Authors	Title	Publisher	Year
		1.				
		2.				
		3.				